

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Assistant Secretary for Housing-Federal Housing Commissioner	Series and Series Number: (Supersedes issue dated December 20, 1993) MATERIALS RELEASE NO. 942d
TO: DIRECTORS, HOUSING DIVISION DIRECTORS, MULTIFAMILY DIVISION DIRECTORS, SINGLE FAMILY DIVISION	ISSUE DATE: June 2, 1998
	REVIEW DATE: June 2, 2001

SUBJECT: 1. Product Thermo-Ply Super Strength Laminated Kraft
Paperboard

**2. Name and Address
of Manufacturer** Simplex Products Division
P.O. Box 10
Adrian, MI 49221

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: Wall sheathing.

DESCRIPTION:

Thermo-Ply Super Strength sheathing consists of laminated kraft paperboard covered with aluminum foil or polyethylene, on one or both surfaces.

REQUIREMENTS:

The laminated kraft paperboard shall be in compliance with Table 1.

Table 1 - Requirements for Thermo-Ply Super Strength Laminated Kraft Paperboard

Physical Properties	Values	Test Method
Thickness, in.	0.137+.006	ASTM C-209
Vapor Tran., perms, max.	0.1	ASTM E-96
Water Absorp, % max.	12.0	ASTM C-209
Tensile strength		ASTM C-209
Parallel to surface,		
psi, min. MD*	4617.0	
CD**	2009.0	
Tensile Strength Perpendicular to surface, psi, min.	1979.3	ASTM C-209
Linear expansion % max.	0.5	ASTM D-1037
Modulus of Rupture, psi, min. MD*	4745.0	ASTM C-209
CD**	2561.0	
Allowable Shear Resistance ^{1, 2, 3}	210 plf	ASTM E-72 (dry)

*Machine Direction

**Cross Machine Direction

Notes:

1. Shear resistance allowances shown here are applicable only when horizontal shear forces caused by wind and earthquake are calculated. The panels shall extend the full wall height and continuously span at least three studs.
2. Joints may be butted or lapped 3/4" min. with a single row of fasteners.
3. The allowable shear resistance, when tested in accordance with ASTM E-72 (dry), is established by taking the lesser of the values determined by dividing the maximum load by 2.5 for areas where the BOCA code applies, or the load at which the deflection exceeds h/480 where h is the height of the wall assembly. For areas where the ICBO or SBCCI code applies, the maximum load is divided by a safety factor of 3.0.

INSTALLATION:

1. Panels shall be installed according to the manufacturer's instructions with 16 ga., 7/16" minimum crown staples with 1-1/4" legs, or 11 ga., 1-1/4" long roofing nails.
2. Panels shall be installed with the long dimension vertical with fasteners spaced 3" o.c. at the edges and 3" o.c. at the intermediate supports when used as a structural panel.

3. All nails and staples shall be driven flush with the surface. Nail heads and staple crowns shall not cut the surface of the panel.
4. Joints shall be butted or lapped, and shall occur over studs, plates, or solid blocking. Cut or trim with saw, knife, or router.
5. Thermo-Ply Super Strength Laminated Kraft paperboard panels shall not be used as a nail base. Nail siding to the studs or to furring strips and studs.
6. Thermo-Ply Super Strength Laminated Kraft paperboard panels, with polyethylene on one side, shall be used for stucco applications without line wires or sheathing paper. The polyethylene surface shall be placed towards the stucco. Sheathing paper shall be used when Thermo-Ply Super Strength Laminated Kraft paperboard panels are covered with aluminum foil on both sides.
7. A vapor barrier of 0.1 perm or less shall be provided on the warm side of the wall covered with Thermo-Ply Super Strength, or else a vapor venting system to the outside shall be provided.
8. Panels may be used in fire rated exterior wall assemblies provided that they comply with the fire requirements of the local building code.
9. Minimum fastening for panels in nonstructural applications, shall be 11 ga. by 1-1/4" long galvanized roofing nails or 16 ga. staples with a 7/16" minimum crown length and a 1-1/4" long leg, placed 6" o.c. at the panel edges and 12" o.c. at the intermediate supports.

CERTIFICATION:

Simplex Products Division certifies that Thermo-Ply Super Strength Sheathing, produced in conformance to this Materials Release (MR), is in compliance with a validation program at RADCO, Inc. in accordance with the Code of Federal Regulations, 24 CFR 200.935. RADCO shall inspect the manufacturer's facility every year at the plant to assure that the initially accepted quality control procedures are being followed. Sufficient samples of this product shall be selected and tested each year to validate the manufacturer's conformance to the requirements of this MR. Each piece of sheathing certified as conforming to this MR shall be labeled with the following information:

1. The RADCO validation mark
2. The manufacturer's name
3. The manufacturer's conformance to this MR
4. Span rating

WARRANTY:

Simplex Products Division warrants Thermo-Ply Super Strength sheathing for four (4) years, under normal use, against defects or poor performance. Should any defect or poor performance occur, Simplex Products Division will make a pro rata allowance for the replacement of the defective product.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Consumer and Regulatory Affairs, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P.O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revision may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this MR. HUD will notify the manufacturer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
2. the manufacturer has changed its organizational form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned firm, and is not transferable to any person or successor entity.
